

LINE EDGE ROUGHNESS REDUCTION FOR TRENCH ETCH

ABSTRACT OF THE DISCLOSURE

- 5 A method for etching a trench to a trench depth in a dielectric layer over a substrate is provided. An ARC is applied over the dielectric layer. A photoresist mask is formed on the ARC, where the photoresist mask has a thickness. The ARC is etched through. A trench is etched into the dielectric layer with a dielectric to photoresist etch selectivity between 1:1 and 2:1.